

Claims:

1. A method of sharing data, comprising:
transmitting data between dissimilar communication devices, wherein said dissimilar communication devices communicate through a common interface that operates on said dissimilar communication devices in accordance with aspects of said dissimilar communication devices that have been abstracted.

2. The method of claim 1, wherein said dissimilar communication devices form a local area network (LAN).

3. The method of claim 1, and further comprising, prior to said transmitting data, establishing a network connection between said dissimilar communication devices.

4. The method of claim 1, wherein said common interface comprises a layered functional hierarchy having multiple layers.

5. The method of claim 4, wherein at least one of said multiple layers comprises a protocol layer, said protocol layer including at least two protocols.

6. The method of claim 5, wherein said at least two protocols comprise a messaging protocol and a discovery protocol.

7. The method of claim 6, wherein at least one of said multiple layers comprises an abstraction layer including said aspects of said dissimilar communication devices that have been abstracted.
8. The method of claim 4, wherein said data is transmitted between said dissimilar devices through a layer of said layered functional hierarchy.
9. The method of claim 4, wherein at least one of said layers comprises an operating system layer.
10. The method of claim 9, wherein said operating system layer includes the capability to access components of said dissimilar devices.
11. The method of claim 1, wherein said data comprises at least one file.
12. The method of claim 11, wherein said at least one file comprises a digital media file.
13. The method of claim 12, wherein said digital media file comprises at least one of: a digital video file and a digital audio file.
14. The method of claim 1, wherein said dissimilar communications devices at least include: computing devices, wherein the computing devices may be configured to exchange data by use of differing protocols, digital audio devices, remote control devices, wireless phones, and digital media devices.

15. The method of claim 14, wherein said aspects of said dissimilar communications devices that have been abstracted include: controlling, executing, recording, storing, discovering, and messaging.
16. The method of claim 1, wherein at least one of said dissimilar communications devices includes the capability to control another of said dissimilar communications devices.
17. The method of claim 1, wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: access digital data, execute digital data, and transfer digital data.
18. The method of claim 17, wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: store digital data, transfer digital data, and organize digital data.
19. An article comprising: a storage medium, said storage medium having stored thereon instructions, that when executed, result in:
transmitting data between dissimilar communication devices, wherein said dissimilar communication devices communicate through a common interface that operates on said dissimilar communication devices in accordance with aspects of said dissimilar communication devices that have been abstracted.

20. The article of claim 19, wherein said dissimilar communication devices form a local area network (LAN).
21. The article of claim 19, wherein said instructions when executed, further result in: prior to said transmitting data, establishing a network connection between said dissimilar communication devices.
22. The article of claim 19, wherein said instructions when executed, further result in: said common interface comprising a layered functional hierarchy having multiple layers.
23. The article of claim 22, wherein said instructions when executed, further result in: at least one of said multiple layers comprising a protocol layer, said protocol layer including at least two protocols.
24. The article of claim 23, wherein said instructions when executed, further result in: said at least two protocols comprising a messaging protocol and a discovery protocol.
25. The article of claim 24, wherein said instructions when executed, further result in: at least one of said multiple layers comprising an abstraction layer including said aspects of said dissimilar communication devices that have been abstracted.
26. The article of claim 22, wherein said instructions when executed, further result in: said data being transmitted between said dissimilar devices through a layer of said layered functional hierarchy.

27. The article of claim 22, wherein said instructions when executed, further result in: at least one of said layers comprising an operating system layer.
28. The article of claim 27, wherein said instructions when executed, further result in: said operating system layer including the capability to access components of said dissimilar devices.
29. The article of claim 19, wherein said instructions when executed, further result in: said data comprising at least one file.
30. The article of claim 29, wherein said instructions when executed, further result in: said at least one file comprising a digital media file.
31. The article of claim 30, wherein said instructions when executed, further result in: said digital media file comprising at least one of: a digital video file and a digital audio file.
32. The article of claim 19, wherein said dissimilar communications devices at least include: computing devices, wherein the computing devices may be configured to exchange data by use of differing protocols, digital audio devices, remote control devices, wireless phones, and digital media devices.

33. The article of claim 32, wherein said instructions when executed, further result in: said aspects of said dissimilar communications devices that have been abstracted including: controlling, executing, recording, storing, discovering, and messaging.
34. The article of claim 19, wherein said instructions when executed, further result in: at least one of said dissimilar communications devices including the capability to control another of said dissimilar communications devices.
35. The article of claim 19, wherein said instructions when executed, further result in: at least one of said dissimilar communications devices including the capability to perform at least one of the following tasks: access digital data, execute digital data, and transfer digital data.
36. The article of claim 35, wherein said instructions when executed, further result in: at least one of said dissimilar communications devices including the capability to perform at least one of the following tasks: store digital data, transfer digital data, and organize digital data.
37. An apparatus, comprising:
- a dissimilar communication device capable of sharing data with other dissimilar devices, wherein said dissimilar communication devices communicate through a common interface that operates on said dissimilar communication devices in accordance with aspects of said dissimilar communication devices that have been abstracted.

38. The apparatus of claim 37, wherein said dissimilar communication devices are capable form a local area network (LAN).
39. The apparatus of claim 37, and further comprising, prior to said sharing data, being capable of establishing a network connection between said dissimilar communication devices.
40. The apparatus of claim 37, wherein said common interface comprises a layered functional hierarchy having multiple layers.
41. The apparatus of claim 40, wherein at least one of said multiple layers comprises a protocol layer, said protocol layer including at least two protocols.
42. The apparatus of claim 41, wherein said at least two protocols comprise a messaging protocol and a discovery protocol.
43. The apparatus of claim 42, wherein at least one of said multiple layers comprises an abstraction layer including said aspects of said dissimilar communication devices that have been abstracted.
44. The apparatus of claim 40, wherein said data is capable of being shared between said dissimilar devices through a layer of said layered functional hierarchy.

45. The apparatus of claim 40, wherein at least one of said layers comprises an operating system layer.
46. The apparatus of claim 45, wherein said operating system layer includes the capability to access components of said dissimilar devices.
47. The apparatus of claim 37, wherein said data comprises at least one file.
48. The apparatus of claim 47, wherein said at least one file comprises a digital media file.
49. The apparatus of claim 48, wherein said digital media file comprises at least one of: a digital video file and a digital audio file.
50. The apparatus of claim 37, wherein said dissimilar communications devices at least include: computing devices, wherein the computing devices may be configured to exchange data by use of differing protocols, digital audio devices, remote control devices, wireless phones, and digital media devices.
51. The apparatus of claim 50, wherein said aspects of said dissimilar communications devices that have been abstracted include: controlling, executing, recording, storing, discovering, and messaging.

52. The apparatus of claim 37, wherein at least one of said dissimilar communications devices includes the capability to control another of said dissimilar communications devices.

53. The apparatus of claim 37, wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: access digital data, execute digital data, and transfer digital data.

54. The apparatus of claim 53, wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: store digital data, transfer digital data, and organize digital data.

55. A network, comprising:

dissimilar communication devices capable of sharing data with other dissimilar devices, wherein said dissimilar communication devices communicate through a common interface that operates on said dissimilar communication devices in accordance with aspects of said dissimilar communication devices that have been abstracted.

56. The network of claim 55, wherein said dissimilar communication devices are capable form a local area network (LAN).

57. The network of claim 55, and further comprising, prior to said sharing data, being capable of establishing a network connection between said dissimilar communication devices.

58. The network of claim 57, wherein said common interface comprises a layered functional hierarchy having multiple layers.
59. The network of claim 58, wherein at least one of said multiple layers comprises a protocol layer, said protocol layer including at least two protocols.
60. The network of claim 59, wherein said at least two protocols comprise a messaging protocol and a discovery protocol.
61. The network of claim 60, wherein at least one of said multiple layers comprises an abstraction layer including said aspects of said dissimilar communication devices that have been abstracted.
62. The network of claim 58, wherein said data is capable of being shared between said dissimilar devices through a layer of said layered functional hierarchy.
63. The network of claim 58, wherein at least one of said layers comprises an operating system layer.
64. The network of claim 63, wherein said operating system layer includes the capability to access components of said dissimilar devices.
65. The network of claim 55, wherein said data comprises at least one file.

66. The network of claim 65, wherein said at least one file comprises a digital media file.
67. The network of claim 66, wherein said digital media file comprises at least one of: a digital video file and a digital audio file.
68. The network of claim 55, wherein said dissimilar communications devices at least include: computing devices, wherein the computing devices may be configured to exchange data by use of differing protocols, digital audio devices, remote control devices, wireless phones, and digital media devices.
69. The network of claim 68, wherein said aspects of said dissimilar communications devices that have been abstracted include: controlling, executing, recording, storing, discovering, and messaging.
70. The network of claim 55, wherein at least one of said dissimilar communications devices includes the capability to control another of said dissimilar communications devices.
71. The network of claim 55, wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: access digital data, execute digital data, and transfer digital data.

72. The network of claim 71, wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: store digital data, transfer digital data, and organize digital data.
73. A method of sharing data, comprising:
 - transmitting a request, wherein the request is transmitted by a requesting device;
 - authenticating the requesting device;
 - establishing a connection, wherein the connection comprises a connection requested by said requesting device, and comprises a connection to a requested device, said requested device being coupled to a local area network (LAN).
74. The method of claim 73, wherein said requested device comprises a gateway device for said LAN.
75. The method of claim 74, wherein other devices coupled to said LAN communicate with said requesting device via said gateway device.
76. The method of claim 75, wherein said requesting device comprises a remote device.
77. The method of claim 76, wherein said remote device comprises a wireless cell phone.

78. The method of claim 77, wherein said remote device comprises at least one of: an audio playback device and a video playback device.
79. The method of claim 73, wherein the connection comprises a connection established at least partially by use of a proxy service.
80. The method of claim 73, wherein said request comprises a request for data.
81. The method of claim 80, wherein said request for data comprises a request for a file.
82. The method of claim 81, wherein said request for a file comprises a request for a multimedia file.
83. An article comprising: a storage medium, said storage medium having stored thereon instructions, that when executed, result in:
transmitting a request, wherein the request is transmitted by a requesting device;
authenticating the requesting device;
establishing a connection, wherein the connection comprises a connection requested by said requesting device, and comprises a connection to a requested device, said requested device being coupled to a local area network (LAN).

84. The article of claim 83, wherein said requested device comprises a gateway device for said LAN.

85. The article of claim 84, wherein said instructions, when executed, further result in: other devices coupled to said LAN communicating with said requesting device via said gateway device.

86. The article of claim 85, wherein said requesting device comprises a remote device.

87. The article of claim 86, wherein said remote device comprises a wireless cell phone.

88. The article of claim 86, wherein said remote device comprises at least one of: an audio playback device and a video playback device.

89. The article of claim 83, wherein said instructions, when executed, further result in: the connection comprising a connection established at least partially by use of a proxy service.

90. The article of claim 83, wherein said instructions, when executed, further result in: said request comprising a request for data.

91. The article of claim 90, wherein said instructions, when executed, further result in: said request for data comprising a request for a file.

92. The article of claim 91, wherein said instructions, when executed, further result in:
said request for a file comprising a request for a multimedia file.

93. A network, comprising:
a requesting device to transmit a request;
the network to then establish a connection, after authentication of said requesting
device, wherein the connection comprises a connection requested by said requesting
device, and comprises a connection to a requested device, said requested device being
coupled to a local area network (LAN).

94. The network of claim 93, wherein said requested device comprises a gateway
device for said LAN.

95. The network of claim 94, wherein other devices coupled to said LAN communicate
with said requesting device via said gateway device.

96. The network of claim 95, wherein said requesting device comprises a remote
device.

97. The network of claim 96, wherein said remote device comprises a wireless cell
phone.

98. The network of claim 96, wherein said remote device comprises at least one of: an audio playback device and a video playback device.
99. The network of claim 93, wherein the connection comprises a connection established at least partially by use of a proxy service.
100. The network of claim 93, wherein said request comprises a request for data.
101. The network of claim 100, wherein said request for data comprises a request for a file.
102. The network of claim 101, wherein said request for a file comprises a request for a multimedia file.
103. An interface to share data, said interface being established between devices by:
 - transmitting a request, wherein the request is transmitted by a requesting device;
 - authenticating the requesting device; and
 - establishing a connection, wherein the connection comprises a connection requested by said requesting device, and comprises a connection to a requested device; said requested device being coupled to a local area network (LAN).
104. The interface of claim 103, wherein said requested device comprises a gateway device for said LAN.

105. The interface of claim 104, wherein other devices coupled to said LAN communicate with said requesting device via said gateway device.
106. The interface of claim 105, wherein said requesting device comprises a remote device.
107. The interface of claim 106, wherein said remote device comprises a wireless cell phone.
108. The interface of claim 106, wherein said remote device comprises at least one of: an audio playback device and a video playback device.
109. The interface of claim 103, wherein the connection comprises a connection established at least partially by use of a proxy service.
110. The interface of claim 103, wherein said request comprises a request for data.
111. The interface of claim 110, wherein said request for data comprises a request for a file.
112. The interface of claim 111, wherein said request for a file comprises a request for a multimedia file.